1. A method of transforming calibration data in a wafer production apparatus, said method comprising the steps of:

acquiring calibration data representative of the alignment of a second machine with respect to a first machine; and

exchanging first coordinates of said calibration data with second coordinates of said calibration data.

2. The method of claim 1, further comprising rotating a production wafer with respect to a calibration wafer.

3. The method of claim 2, wherein said rotation of said production wafer is 90°.

4. The method of claim 1, wherein said first coordinates are x-coordinates and said second coordinates are y-coordinates.

5. A method of aligning a production wafer comprising the steps of:

retrieving calibration data for the alignment of a second machine with respect to a first machine;

retrieving alignment data for the production wafer in the first machine; and

transforming said calibration data by switching coordinates.

6. The method of claim 5, wherein said production wafer is rotated 90° with respect to the position of a calibration wafer in said second machine.

7. The method of claim 5, wherein said coordinates are x-coordinates and y-coordinates.

8. The method of claim 5, wherein said first machine is a stepper, and said second machine is a scanner.

9. The method of claim 8, further comprising the step of storing said transformed calibration data in said first machine.

10. The method of claim 9, wherein said first machine uses said transformed calibration data to adjust the alignment of the production wafer.

11. The method of claim 10, wherein two successive areas of the production wafer are exposed in the stepper.

12. A method of aligning a production wafer comprising the steps of:

calibrating the wafer stage of the second machine to the wafer stage of the first machine;

transforming the data from said calibration;

measuring the location of a production wafer in the first machine;

transferring the production wafer to the second machine;

adjusting the location of the production wafer in the second machine using said transformed data.

13. The method of claim 12, wherein said alignment of the production wafer in the second machine is rotated 90° with respect to said calibration.

14. The method of claim 12, wherein said first machine is a stepper, and said second machine is a scanner.

15. The method of claim 12, further comprising the step of storing said transformed calibration data in said first machine.

16. The method of claim 15, wherein said first machine adjusts the location of the production wafer using the transformed data from the calibration.

17. A method of aligning wafers in machines used to manufacture an integrated circuit, comprising the steps of:

measuring the difference in location from a location in a first machine to a nominally identical location in a second machine using a first wafer maintained in the same orientation;

transforming said difference in said locations to account for a change in wafer orientation;

measuring the location of a second wafer in the first machine;

transferring the second wafer to the second machine in a different orientation;

adjusting the location of the second wafer in the second machine using said transformed differences.

18. The method of claim 17, wherein said first wafer is a calibration wafer.

19. The method of claim 17, wherein said second wafer is a production wafer.

20. The method of claim 18, wherein said difference is measured by comparing patterns formed in the calibration wafer by the first machine and the second machine.

21. The method of claim 20, wherein the pattern is cruciform.

22. The method of claim 18, wherein said calibration wafer is mounted in a wafer stage and said location of the calibration wafer is determined by measuring the location of the wafer stage.

23. The method of claim 22, wherein the wafer stage has mirrors, and the location of the wafer stage is measured using interferometers mounted in said first and second machines.

24. The method of claim 17, wherein said first machine is a stepper.

25. The method of claim 17, wherein said second machine is a scanner.

26. The method of claim 25, wherein two successive areas of the production wafer are exposed in the stepper.

27. The method of claim 25, further comprising the step of storing said data in said stepper.

28. The method of claim 27, wherein said stepper uses said stored data to adjust the location of the second wafer.

29. A method of manufacturing an integrated circuit, comprising the steps of:

forming a first cruciform pattern in a calibration wafer in a first orientation in a first machine;

forming a second cruciform pattern in said calibration wafer in said first orientation in a second machine;

measuring the difference between said first cruciform pattern and said second cruciform pattern;

storing said difference in a memory;

transforming said difference to account for a change in orientation;

processing sub-areas in a production wafer in said first orientation in said first machine;

determining the location of said production wafer in said first machine;

transferring said production wafer to said second machine in a second orientation;

adjusting said location using said difference;

aligning said production wafer in said second machine using said adjusted location data; and

processing sub-areas in said production wafer in said second machine.

30. The method of claim 29, wherein said first machine is a stepper and said second machine is a scanner.

31. The method of claim 29, wherein said second orientation is rotated 90° from said first orientation.

32. The method of claim 31, wherein two successive areas of the production wafer are exposed in the stepper.

33. The method of claim 29, wherein said difference is transformed by switching coordinates of the cruciform pattern.

34. The method of claim 30, further comprising storing said data in said stepper.

35. The method of claim 34, wherein said stepper uses said stored data to adjust the alignment of the production wafer using the transformed coordinates.

36. The method of claim 33, wherein said difference is the array $(x_A - x_B)$, y, x, $(y_A - y_B)$, and said transformed difference is represented by the array $(x_A - y_B)$, y, x, $(y_A - x_B)$.

37. A system for transforming calibration data in a wafer production apparatus, said system comprising:

a device for acquiring calibration data representative of the alignment of a second machine with respect to a first machine; and

a device for exchanging first coordinates of said calibration data with second coordinates of said calibration data.